VIA ELECTRONIC FILING

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
	)	
Amendment of Part 101 of the Commission's Rules to	)	WT Docket 10-153
Facilitate the Use of Microwave for Wireless Backhaul	)	
and Other Uses and to Provide Additional Flexibility to	)	
Broadcast Auxiliary Service and Operational Fixed	)	
Microwave Licenses.	)	

EX PARTE FILING OF WIRELESS STRATEGIES, INC. (WSI)
REGARDING WT DOCKET 10-153

I. Safely Deploying Small Antennas

In their filing of October 25, 2010[1], Comsearch recommended that the FCC could allow a small non-compliant antenna in the 6GHz band having a diameter of 4 feet. Then, less than 180 days later, they changed their mind and recommended the Commission allow a small antenna diameter of 3 feet. Clearly, if the Commission had acted upon the initial Comsearch recommendation, industry would have been forced to use unnecessarily large antennas when smaller antennas could have been safely deployed.

One of the stated principal goals of the Commission is to find ways of bringing broadband to un-served and underserved communities. Of course the reason communities are un-served or underserved is that it is not economically viable. A major monthly operating cost is associated with site lease charges that are directly related to antenna diameter. Therefore, any regulation that prevents the optimization of antenna size would be detrimental to bringing broadband service to un-served and underserved communities.

When the Commission allowed the use of small non-compliant antennas in the 11GHz band it added the condition that non-compliant antennas must comply with Rule 101.115(f). With Rule 101.103 and with minor revisions to Rule 101.115(f), as proposed by WSI, the Commission can achieve its goal of allowing small antennas that will not cause harmful interference to existing licensed stations nor block new applicant paths. This approach would also prevent the rules from rapidly becoming obsolete[2] because of continuing technological advances, while giving microwave link designers the opportunity to design the most cost effective microwave networks so as to facilitate bringing broadband to un-served and underserved communities.

[1] Comesearch, October 25, 2010, re WT Docket 10-153, page 25.
[2] e.g. a new rule with specifications resulting in a 4ft dia. antenna becoming obsolete less than 180 days later.

II. The Problem in Relaxing Specifications in Rural Areas

WSI is against the relaxing of the Commission's rules in rural areas as we believe the concept of doing so is based on an obsolete paradigm. For example, prior to the broadband revolution it was subscriber density that determined the separation of cell sites, with it taking hundreds of voice-only subscribers to fully load a 2G cell site. In urban areas the cell sites were more densely populated than in rural areas because of the difference in population density. Today it only takes a few subscribers downloading or uploading video or other high data content communications to fully load a 4G cell site. These few subscribers could be in an urban area or a rural area. It is spectrum that is the finite resource and is needed in both urban and rural areas regardless of the population density, and is therefore of equal importance in rural and urban environments. We believe that the use of small non-compliant antennas should be governed by the same rules in rural and urban areas -- Rules 101.103 and 101.115, including the proposed revised 101.115(f) -- since it would maintain the spectrum re-use capabilities of compliant (Category A) antennas while allowing the most cost effective sized antenna to be safely used in rural and urban communities.

III. The Many Real Benefits of Small Antennas versus the Speculative Argument Against

For completeness we have restated below the benefits of smaller antennas and the only argument against.

The Benefits of Smaller Antennas Operating Under the Proposed Minor Changes to Rule 101.115(f)

- No increased potential to cause harmful interference or to block new applicant paths
- Lower monthly antenna site lease charges
- Lower cost to manufacture
- Easier and therefore less expensive to install
- Lower cost to maintain
- Makes them practical for installation at sites incapable of supporting large antennas
- Raise fewer aesthetic objections
- Permit easier compliance with local zoning and homeowner association rules
- Create employment opportunities in microwave R&D, manufacturing and construction
- Permit the users of the bands to efficiently match the antenna to the application

The Sole Argument Against Allowing Smaller Antennas

- Speculation that a few operators could deliberately delay complying with the rules associated with their license, and the implication that the Commission would tolerate such blatant evasion of these rules.

IV. Conclusion

With existing rules and the proposed minor changes to Rule 101.115(f) in place, the Commission would significantly increase the effective use of the 6GHz and 11GHz bands by making it economically viable to bring broadband to un-served and underserved communities through the use of small antennas, all without causing harmful interference or blocking any new applicant paths.

Respectfully submitted

Michael Mulcay,

Chairman and CTO
Wireless Strategies Inc.
PO Box 2500
Carmel Valley, CA 93924
(831) 659-5618

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cc:

Julius Genachowski, Chairman
Robert McDowell, Commissioner
Mignon Clyburn, Commissioner
Jessica Rosenworcel, Commissioner
Adjit Pai, Commissioner
Zachary Katz, Chief of Staff to Chairman Geneachowski
Charles Mathias, Special Council to Chairman Genachowski
Angela Giancarlo, Chief of Staff to Commissioner McDowell
Dave Grimaldi, Senior Legal Advisor to Commissioner Rosenworcel
Matthew Berry, Chief of Staff to Commissioner Pai
Ruth Milkman, Chief WTB
Blaise Scinto, Chief Broadband Division WTB
John Schauble, Deputy Chief Broadband Division WTB
Stephen Buenzow, Deputy Chief Broadband Division WTB